

**Notice of Allowability**

Application No.

10/774,258

Examiner

Courtney Thomas

Applicant(s)

KUTSCHERA, WOLFGANG

Art Unit

2882

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 07/02/04.
2. ☒ The allowed claim(s) is/are 1-11.
3. ☒ The drawings filed on 02 July 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 07/02/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

## DETAILED ACTION

### *Allowable Subject Matter*

1. Claims 1-11 are allowed.
2. The following is an examiner's statement of reasons for allowance:
3. **As per claim 1 and dependent claims 2-7**, the examiner found no reference in the prior art that disclosed or made obvious a rotating anode for an X-ray tube comprising: an anode body composed of composite fiber material, including fibers having a preferred heat conductivity in a longitudinal fiber direction, wherein a majority of the fibers have opposite end faces that terminate bluntly at a focal ring and at a surface (of a cooling system aligned with the anode axis) with respective end surfaces in direct, heat-conducting, abutting contact with the focal ring and with the cooling system as recited in independent claim 1.
4. **As per claim 8 and dependent claims 9-11**, the examiner found no reference in the prior art that disclosed or made obvious a method for producing a rotating anode comprising the steps of: a) producing a plurality of shell-shaped formed components respectively of different sizes and similar geometric shapes for nesting within each other with an outer diameter of a smaller of the formed components corresponding to an inner diameter of a larger of the formed components, b) producing a centrally disposed bore in each of the formed components, the respective bores having substantially identical diameters, c) combining the formed components by nesting to form an anode body with the bores concentrically aligned and d) disposing a cooling system in the anode body in the bores of the formed components as recited in independent claim 8.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

6. **U.S. Patent 3,735,175 to Blomgren, Jr.** discloses a rotary anode for an X-ray tube comprising a cooling system aligned with the anode axis of rotation; wherein the anode body has surfaces facing the cooling system and thermally interacting with the cooling system (see Fig. 1).

7. **U.S. Patent 6,430,264 to Lee** discloses a rotary anode for an X-ray tube constructed of composite fiber material having directionally oriented fibers enabling the anode to withstand mechanical stresses due to rotational motion and high temperatures associated within an X-ray tube environment (column 6, lines 45-67, column 7, lines 1-16; see also Figs. 2 & 4).


8. **U.S. Patent Application Publication 2004/0013234 to Kutschera** discloses an X-ray tube anode composed of composite fiber material having fibers configured to radiate heat away from a focal point [0016]. The reference fails to disclose the fibers as possessing a longitudinal heat dissipation direction wherein a majority of the fibers have opposite end faces that terminate bluntly at a focal ring and at a surface (of a cooling system aligned with the anode axis) with respective end surfaces in direct, heat-conducting, abutting contact with the focal ring and with the cooling system. Examiner notes that the Application Publication does not qualify as prior art under 102 and/or 103, as it is applicant's own work (see MPEP 2132 sec. III and 2132.01).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney Thomas whose telephone number is (571) 272-2496. The examiner can normally be reached on M - F (9 am - 5 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272 2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Courtney Thomas **CT**  
Examiner  
Art Unit 2882

  
EDWARD J. GLICK  
SUPERVISORY PATENT EXAMINER